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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,747	09/25/2003	Gerrit Willem Hiddink	1-12	2752
47386 7590 12/11/2007 RYAN, MASON & LEWIS, LLP 1300 POST ROAD SUITE 205 FAIRFIELD, CT 06824			EXAMINER WONG, BLANCHE	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 12/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/670,747

Applicant(s)

HIDDINK ET AL.

Examiner

Blanche Wong

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 24, 2007 have been fully considered but they are not persuasive.

With regard to claims 1,11,21, Applicant states that "Johnson does not, however, disclose or suggest that the reduced retransmission rate is *progressively* selected from a group of more than *one* transmission rate." Remarks, p.7, lines 17-19, with emphasis according to the Remarks. However, Examiner respectfully disagrees. For the claim amendment, Applicant referenced p.2, lines 21-22 and p.3, lines 3-13, of the originally filed disclosure for support. Specification discloses "[t]he retry count expiry avoidance algorithm temporarily reduces the transmission rate of the current frame in a progressive manner. The transmission rate to be used for subsequent frames is selected based on the highest rate permitted by the signal quality", p.2, lines 29-30-p.3, line 2, and "... the retry count⁴ expiry avoidance algorithm enters a fallback state, where the transmission rate is decreased in a progressive manner", p.3, lines 9-11. Specification does not disclose "progressively selected" nor "a group of more than one transmission rate". The reduction, not the selection, is what is done progressively. When the reduction is done progressively, it is done incrementally, not necessary selecting a transmission rate from several transmission rates. That is, incremental lends itself to a transmission rate among several lower transmission rates and no selection is necessary.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1-25** are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for progressively reducing, does not reasonably provide enablement for progressively selected from a group of more than one transmission rate in claims 1,11,21. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. See para. 1 above.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-10 and 21-25** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, it is unclear whether the "current frame" in lines 3 and 4 is part of the "transmission of data" in line 2 because "an acknowledgement" in line 4 indicates that there is a transmission of the current frame.

With regard to claim 21, it is unclear whether the "current frame" in lines 3 and 4, and the "subsequent frame" in line 5, are part of the "transmission of data" in line 2 because "an acknowledgement" in line 4 indicates that there is a transmission of the current frame and

"said transmission rate for a subsequent frame" in lines 4-5 indicates that there is a transmission of the subsequent frame.

6. There is insufficient antecedent basis for this limitation in the claim.

Claim 21, lines 4-5, "said transmission rate".

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-25** are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et. al. (EP 1 096 729 A1) (provided by Applicant).

With regard to claims 1 and 11, Johnson discloses transmitter and receiver elements comprising:

a controller (**port card of Fig. 2, para. [0024]**) to control of transmission of data; and
a rate fallback mechanism (**transmitter and receiver elements of the port card of Fig. 2, para. [0024]**) that reduces a retransmission rate only for a current fame (**step 406 in Fig. 4; switches the payload data rate of the packet to a lower data rate, para. [0028], col. 10, lines 5-6**) when an acknowledgement is not received for said current frame (**fail in step 405 in Fig. 4; no confirmation signal from the receiving entity that the packet has been received, para. [0028], col. 9, line 58-col. 10, line 1**), wherein said reduced

transmission rate is progressively selected from a group of more than one transmission rate
(the reduced transmission rate must be one of the lower transmission rates).

With regard to claims 2 and 12, Johnson further discloses a predefined number of equal rate attempts **(attempted three times, para. [0028], col. 10, line 2).**

With regard to claims 3 and 13, Johnson further discloses an available signal quality **(best mode implement, para. [0028], col. 9, lines 17).**

With regard to claims 4 and 14, Johnson further discloses a retry count **(predetermined number of retransmissions, para. [0029], col. 10, line 57).**

With regard to claims 5 and 15, Johnson further discloses a table of available rates **(the predetermined number of lowering data rates is also the number of available rates) (the predetermined number of retransmissions at the lower payload data rate is preprogrammed and optimized by carrying out trials and experimentation in user environments to determine an optimum number of retries, para. [0029, col. 10, lines 57-41).**

With regard to claims 6 and 16, Johnson further discloses at least a portion of rates supported by a receiving station **([receiving entity in Fig. 5] adjusting its**

synchronization to receive higher rate data, para. [0030], col. 11, lines 4-5, or no further re-synchronization, col. 11, line 8).

With regard to claims 7 and 17, Johnson further discloses an algorithm **(an algorithm runs on a computer) ([Fig. 4 is] a process carried out by ... a transmitting computer entity in a transmit mode, para. [0027, col. 8, line 56).**

With regard to claims 8 and 18, Johnson further discloses IEEE 802.11 Standard **(wireless local area network, para. [0020] and CSMA, para. [0024, col. 7, line 18).**

With regard to claims 9 and 19, Johnson further discloses a rate fallback mechanism **(transmitter and receiver elements of the port card of Fig. 2, para. [0024]) that restores (next packet) a transmission rate that was in use before (higher data rate) said retransmission rate was reduced (a next packet to be transmitted is again attempted to be transmitted at the higher payload data rate, para. [0026], col. 8, lines 43-45).**

With regard to claims 10 and 20, Johnson further discloses a rate fallback mechanism **(transmitter and receiver elements of the port card of Fig. 2, para. [0024]) that proceeds directly to a fallback state (lower data rate) (switches the payload data rate of the packet to a lower data rate, col. 10, lines 5-6) if a signal quality is not sufficient to**

support a data rate associated with an equal rate retry (**the higher data rate, para. [0028, col. 10, line 3).**

With regard to claim 21, Johnson discloses transmitter and receiver elements comprising:

a controller (**port card of Fig. 2, para. [0024]**) to control of transmission of data; and
a rate fallback mechanism (**transmitter and receiver elements of the port card of Fig. 2, para. [0024]**) that reduces a retransmission rate only for a current fame (**step 406 in Fig. 4; switches the payload data rate of the packet to a lower data rate, para. [0028], col. 10, lines 5-6**) when an acknowledgement is not received for said current frame (**fail in step 405 in Fig. 4; no confirmation signal from the receiving entity that the packet has been received, para. [0028], col. 9, line 58-col. 10, line 1**) and increases said transmission rate (**higher data rate**) for a subsequent frame (**next packet**) (**a next packet to be transmitted is again attempted to be transmitted at the higher payload data rate, para. [0026], col. 8, lines 43-45**), wherein said reduced retransmission rate is progressively selected from a group of more than one transmission rate (**the reduced transmission rate must be one of the lower transmission rates**).

With regard to claim 22, Johnson further discloses a predefined number of equal rate attempts (**attempted three times, para. [0028], col. 10, line 2**).

With regard to claim 23, Johnson further discloses an available signal quality (**best mode implement, para. [0028], col. 9, lines 17).**

With regard to claim 24, Johnson further discloses a retry count (**predetermined number of retransmissions, para. [0029], col. 10, line 57).**

With regard to claim 25, Johnson further discloses a rate fallback mechanism (**transmitter and receiver elements of the port card of Fig. 2, para. [0024])** that restores (**next packet**) a transmission rate that was in use before (**higher data rate**) said retransmission rate was reduced (**a next packet to be transmitted is again attempted to be transmitted at the higher payload data rate, para. [0026], col. 8, lines 43-45).**

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EW

BW
November 27, 2007

EDAN .ORGAD
SUPERVISORY PATENT EXAMINER

Edan Orgad